

represented by Dixon in *P. silvestris*. Nearest the tip are the two sterile nuclei (c), that of the stalk-cell and that of the tube, which have lost their original outline and evidently have begun to disintegrate. Behind them are the male cells (A and B), usually much more deeply stained than the sterile nuclei, and with B slightly darker than A. The protoplasm about the nuclei contains numerous starch grains, stained red by the erythrosin, as are the two sterile nuclei, and appearing in sharp contrast with the generative nuclei and the wall of the tube, stained blue by cyanin.

*Figure 6* is contributed by Mr. W. D. Merrell, and represents a pollen-tube of *Taxus baccata*, which shows an interesting deviation from the description given by Belajeff. The tube has reached and spread out over the top of the endosperm region, in which an archeogonium is seen. At an unusual distance up the tube is the large generative cell, not yet divided into the large and small male cells. Above the generative cell lie the consorting stalk-cell nucleus and tube nucleus, whose position is described as invariably in advance of the generative cell. In fact the tube nucleus is normally in advance of the generative cell, and the stalk-cell nucleus soon passes it. Belajeff states that at the very tip of the tube the generative cell divides, and the larger male cells pass into the oosphere, leaving the smaller male cell and the sterile nuclei, now more or less disorganized, stranded in the tube. The preparation figured would indicate that the generative cell sometimes passes in front of the sterile nuclei at an earlier stage than noted by Belajeff. In 6A the general relation of parts is indicated in outline.—JOHN M. COULTER, *University of Chicago*.

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#### MYRIOSTOMA COLIFORME.

AUGUST the 28th, 1896, while on an excursion to Albino Beach, tendered to the Botanical Section of the A. A. S. by the Buffalo Naturalist's Field Club, I had the good fortune to find two specimens of *Myriostoma coliforme*. This little fungus is especially interesting in that although very few specimens have been found since it was first recorded, it seems to have a very wide distribution both in Europe and America. Previous to this it had been reported from but two points in North America: first from Colorado by Mr. Peck, and afterwards from Florida by Dr. Underwood.

The specimen which I have answers in nearly every respect to the

description given by Mr. A. P. Morgan. It is reflexed and divided into eleven distinct segments; the inner peridium is depressed, slightly globose, being nearly twice as broad as deep; the width is about one inch, and there are eight distinct openings.

The specimen was found in a dense wood, about three hundred yards from the lake shore, and about seventy-five or a hundred feet above the water level.

It was first recorded in Ray's *Synopsis* in 1724; described and figured by Dickinson from Great Britain in 1785; reported from Colorado by Charles H. Peck; collected in Florida by L. M. Underwood in 1891; notes published by A. P. Morgan in *American Naturalist*, April 1892.—MEL T. COOK, *DePauw University, Greencastle, Ind.*

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#### THE COMMON USTILAGO OF MAIZE.

MUCH diversity of usage obtains in writing the name of the common smut of Indian corn (maize). Probably *Ustilago Maydis* Cda. is the form that has been oftenest employed. Since the appearance of Winter's revised edition of Rabenhorst's *Kryptogamen-Flora von Deutschland* in 1881 the form introduced there by the editor, *U. Zeæ-Mays* (DC.) Wint., has been much in favor. The last change to which the purists have given adherence is the form derived by Magnus,<sup>1</sup> and published in 1895. After going over the ground carefully he decided that the name should be *U. Mays-Zeæ* (DC.) Magn.

For some time past the botanical department of the Indiana Experiment Station has been studying some economic features of the smut disease of corn, and incidentally looked into the history of the Latin name of the parasite. As the conclusion attained does not agree with that of previous writers, but brings forward another variation on the name, it is thought best to publish the name adopted and a brief synonymy in advance of the bulletin on the general subject, which is now in course of preparation. The writer's assistant, Mr. William Stuart, is entitled to much credit for carefully going over the accessible literature. He had arrived at the same conclusion as Professor Magnus a short time before the latter's article on the subject appeared. Since then it has been my good fortune to obtain access to other works in the libraries of the British Museum and the University of Bonn, which materially change the result.

<sup>1</sup>Deutsche bot. Monatsschrift 13:50.